

## Tax Management versus Tax Minimization

### Quick Notes...

The objective of good tax management should be to maximize income and net worth after taxes.

Capital purchases should be based on sound business principles rather than impulse or emotions.

All business people have to pay income and self-employment taxes -- providing they realize profits. The big question is, what amount of tax should they pay as they strive to reach their financial goals? Should they minimize taxes in a particular year? Are there ways to manage tax liabilities over a period of years so as to maximize net worth? The objective of good tax management should be to maximize income after taxes over time, not to minimize taxes in a given year.

### Tax Reduction

A common strategy to reduce taxes in a particular year is to purchase a capital asset. Depreciation and interest on borrowed monies reduce taxable profits, thus reducing tax liabilities. The "section 179 expense election" allows individuals to deduct the cost of qualifying property in the year the asset is purchased, subject to a maximum dollar limit.

However, the primary reason for purchasing an asset should be that it is needed in the operation

not only because it might reduce the current year's tax liability. The asset should maintain or improve business operations.

It is crucial that a tax practitioner be consulted before the asset is purchased. It is important to know the tax and financial implications over the life of the investment.

### Cashflow Impacts

The purchase of a capital asset can impact cashflow both positively and negatively over the life of the investment. Debt payments and other expenses as a result of the purchase will have a negative impact, while tax savings and any increased production or reduced expenses will have a positive impact. It is important to know the net impact each year. If the year-to-year deficits cannot be eliminated, then the manager must determine if the investment can be subsidized with cash from other sources within the business.

A consideration about the expense election (or accelerated method of depreciation) to reduce taxes is that profits will be needed to service the debt in subsequent years. Not only are profits needed to make the payment, but the principal portions of the payments are not deductible business expenses. In other words, the business will need cash profits without having matching tax deductions. Depreciation should approximate the non-deductible portion of debt service.

### Present Value

The time value of money is an important consideration in purchasing a capital asset.

What is the present value of a future series of monies? Is it better to expend money now or at some time in the future?

Nearly all people have positive time preferences for money, wealth, and other desired objectives. A dollar received today is preferred to a dollar received tomorrow, or conversely, a dollar spent tomorrow is better than one spent today. Such time preferences occur because there are valuable opportunities for using the money. Interest rates reflect the opportunity costs of not immediately putting the money into the best use.

Discounting is the calculation that tells the current value of an amount of money that will be spent or received in the future. It accounts for the uncertainty of receiving money in the future, alternative uses for the money, and inflation.

**Example**

An example might help explain the financial issues related to the purchase of a capital asset. Let's assume it's November 2000 and you are consulting with your tax preparer regarding your estimated tax liability. You learn that you will owe a significant amount of tax this year.

Your pickup is getting old and needing more repairs. You have an opportunity to purchase a

new pickup for \$35,000. It will be used 100 percent for business and is well suited to the tasks you have in mind. The 7.75 percent interest rate is about what you could earn on your own money, so you plan to borrow the entire purchase amount for five years. The first monthly payment is due December 1, 2000.

Your accountant calculated the annual principal and interest payments, as seen in Table I. Total interest is \$7,330 and cashflows exceed \$42,000.

Table I. Annual Payments for \$35,000 Borrowed for a Period of Five Years Annual Interest Rate of 7.75 Percent

	Annual Payments		
	Interest	Principal	Total
Year 1	226	479	705
Year 2	2,465	6,001	8,466
Year 3	1,983	6,483	8,466
Year 4	1,463	7,003	8,466
Year 5	900	7,566	8,466
Year 6	293	7,468	7,761
<b>Total</b>	<b>\$7,330</b>	<b>\$35,000</b>	<b>\$42,330</b>

Table II. Total Annual Deductions and Tax Savings at the 28 and 15 Percent Federal income Tax Rates

	Total Depreciation <sup>1</sup>	Interest	Total Deductions	Tax Savings	
				28% Applicable Rates <sup>2</sup>	15%
Year 1	20,750	226	20,796	9,977	7,250
Year 2	5,700	2,465	8,165	3,884	2,822
Year 3	3,420	1,983	5,403	2,570	1,868
Year 4	2,052	1,463	3,515	1,672	1,215
Year 5	1,641	900	2,541	1,209	878
Year 6	1,437	293	1,730	823	598
<b>Total</b>	<b>\$35,000</b>	<b>\$7,330</b>	<b>\$42,330</b>	<b>\$20,134</b>	<b>\$14,631</b>

<sup>1</sup> Calculated using mid-quarter convention of 150% declining balance method for 5-year property. The section 179 expense election of \$20,000 is included in total depreciation in Year 1.

<sup>2</sup> Federal income tax rates plus 15.3 % (adjusted by 92.35%) for self-employment taxes and 4.63% for Colorado income taxes.

Next your accountant computes the cost recovery allowances possible for the purchase of the pickup. According to Internal Revenue Service rules you can take a \$20,000 section 179 expense election for the 2000 tax year and depreciate the balance over six years. As seen in Table II, total depreciation in Year 1 is \$20,750 and decreases significantly in the following years.

Total deductions that may be claimed in each year (depreciation and interest) are shown in Table II. Your accountant estimated the tax savings at both the 28 and 15 percent federal income tax rates. The calculation includes Colorado income taxes at a rate of 4.63 percent and self-employment at a rate of 15.3 percent times 92.35 percent.

The overall impact of purchasing the pickup results in a lower net income and reduced net worth. It is important to note that the pickup was assumed to be used 100 percent for business. The negative impacts will be even greater if any portion of the asset was used for personal (non-business) use.

Finally, your accountant computed the cashflow consequences and the net present value of the \$35,000 capital purchase. It was assumed that the pickup would have a \$7,000 salvage value (20 percent of the original value). Please see Tables III and IV.

The example illustrates the typical flow of monies related to the purchase of a capital asset:

1. Cashflows out of the business are substantially reduced in the year that the asset is purchased due to tax savings and,
2. Cashflows out of the business are substantially increased in subsequent years due to loan payments being greater than tax savings.

## **Summary**

Income and cashflow problems are leading causes of business failures. Such difficulties are often results of poor decision making regarding investments in land, machinery, buildings, vehicles, and other capital assets. Purchasing capital assets are necessary to carry out production over time. The evaluation of alternative investments and their impact on profitability and cashflow is critical in the planning process.

Typically, purchases of capital assets do reduce taxes in the year the asset is purchased. However, net cashflows are generally negative in subsequent years.

Before making a capital purchase, managers need to ask themselves:

1. Is the purchase necessary to maintain or improve business operations?
2. Can the business afford the new purchase and increased cashflow requirements?
3. Should the asset be replaced now or at some later time?
4. Will the purchase decision be based on sound business principles rather than impulse or emotions?
5. Are there more profitable alternatives to purchasing the asset, such as leasing, custom hiring, renting, etc?

**Table III. Net Present Value of Cashflows Given 28 Percent Federal Income Tax Rate**

	Total Payments	Tax (28%) Savings	Net	Discount Factor	Net Present Value
Year 1	705	9,977	9,272	0.9434	8,747
Year 2	8,466	3,884	(4,582)	0.8900	(4,078)
Year 3	8,466	2,570	(5,896)	0.8396	(4,950)
Year 4	8,466	1,672	(6,794)	0.7921	(5,382)
Year 5	8,466	1,209	(7,257)	0.7473	(5,423)
Year 6	7,761	823	(6,938)	0.7050	(4,891)
Year 7			7,000	0.6651	4,656
Total	\$42,330	\$20,134	\$(15,196)		\$(11,322)

**Table IV. Net Present Value of Cashflows Given 15 Percent Federal Income Tax Rate**

	Total Payments	Tax (15%) Savings	Net	Discount Factor	Net Present Value
Year 1	705	7,250	6,545	0.9346	6,117
Year 2	8,466	2,822	(5,644)	0.8734	(4,929)
Year 3	8,466	1,868	(6,598)	0.8163	(5,386)
Year 4	8,466	1,215	(7,251)	0.7629	(5,532)
Year 5	8,466	878	(7,588)	0.7130	(5,410)
Year 6	7,761	598	(7,163)	0.6663	(4,773)
Year 7			7,000	0.6227	4,359
Total	\$42,330	\$14,631	\$(20,699)		\$(15,554)

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